Request to Archive

With The National Centers for Environmental Information For NOAA Climate Data Record (CDR) of Ocean Surface Bundle (OSB): Sea Surface Temperature, Version 1.0 Provided by WHOI

2014-01-09

This information will be used by NCEI to conduct an appraisal and make a decision on the request.

1. Who is the primary point of contact for this request?

Carol Clayson WHOI Associate Scientist 508-289-3626 cclayson@whoi.edu

2. Name the organization or group responsible for creating the dataset.

GEWEX SeaFlux Project

3. Provide an overview summarizing the scope of data you want to archive. Describe the outputs, data variables, including their measurement resolution and coverage.

This data collection contains a satellite-derived data set of the ocean surface and near-surface atmospheric properties including sea surface temperature, and near-surface specific humidity, winds, and temperature, and the associated latent and sensible heat fluxes. Two formats are available: the gridded satellite retrievals, and the fully interpolated dataset. Both are available at three-hourly, quarter-degree resolution over the global ice-free oceans. The data covers the SSM/I time frame of mid-1987 through 2007.

4. What is the time period covered by the dataset? (YYYY-MM-DD, YYYY-MM or YYYY)

From 1987-7 to 2007-12

5. Edition or version number(s) of the dataset:

Version 1.0

6. Describe the level to which the data are processed. For example, are these unprocessed raw observations, derived parameters, quality controlled or inter-calibrated data, etc.?

The data uses inter-calibrated SSM/I brightness temperatures and a neural network process to estimate the surface and near-surface variables. The latent and sensible heat fluxes are calculated from the retrieved values. A gridded dataset at swath-level is available, as well as an interpolated data set which covers the entire oceans.

7. Approximate date when the dataset was or will be released to the public:

2014-08-01

8. Who are the expected users of the archived data? How will the archived data be used?

Ocean modelers; coupled modelers; energy and water cycle studies

9. Has the dataset undergone user evaluation and/or an independent review process? Did NCEI participate in design reviews?

Technical reviewed papers on the process have been published; a full description of the dataset is currently in the review process. The dataset has been used in a number of already-published and in press papers.

- 10. Describe the dataset's relationship to other archived datasets, such as earlier versions or related source data. If this is a new version, how does it improve upon the previous version(s)?
- 11. List the input datasets and ancillary information used to produce the data.

The CSU SSM/I intercalibrated brightness temperature data set is used for input, as is the Reynolds Version 2 AVHRR-only SST dataset. Ice masks and land masks are from the GEWEX ISCCP project.

12. List web pages and other links that provide information on the data.

All data as requested by NOAA CDR program.

- 13. List the kinds of documents, metadata and code that are available for archiving. For example, data format specifications, user guides, algorithm documentation, metadata compliant with a standard such as ISO 19115, source code, platform/instrument metadata, data/process flow diagrams, etc.
- Roberts, J. B., C. A. Clayson, F. R. Robertson, and D. Jackson, 2010. Predicting near-surface characteristics from SSM/I using neural networks with a first guess approach. J. Geophys. Res., 115, D19113, doi: 10.1029/200d9JD013099.

Clayson, C. A., J. B. Roberts, and A. Bogdanoff, 2013: SeaFlux Version 1: a new satellite-based ocean-atmosphere turbulent flux dataset. Int. J. Climatol., in revision.

- 14. Indicate the data file format(s).
- 1. netCDF-4
- 15. Are the data files compressed?

No

16. Provide details on how the files are named and how they are organized (e.g., file_name_pattern_YYYYMM.tar in monthly aggregations).

variable_YYYYMMDD.nc in monthly directories

- 17. Explain how to access sample data files and/or a file listing for previewing. If it is not available now, when will it be available?
- 18. What is the total data volume to be submitted?

Historic Data: all historic data or data submitted as a completed collection.

Total Data Volume: 2.5TB Number of Data Files: 350000

19. Are later updates, revisions or replacement files anticipated? If so, explain the conditions for submitting these additional data to the archive.

No additional updates, revisions or replacement data are anticipated.

20. Describe the server that will connect to the ingest server at NCEI for submitting the data.

Physical Location: Woods Hole, MA, USA

System Name: finis.whoi.edu

System Owner: Carol Anne Clayson

Additional Information:

- 21. What are the possible methods for submitting the data to NCEI? Select all that apply.
- 1. FTP PULL
- 2. FTP PUSH
- 22. Identify how you would like NCEI to distribute the data. Web access support depends on the resources available for the dataset.
- 1. Direct download links
- 23. Will there be any distribution, usage, or other restrictions that apply to the data in the archive?

No known constraints apply to the data.

24. Discuss the rationale for archiving the dataset and the anticipated benefits. Mention any risks associated with not archiving the dataset at NCEI.

Data is currently available only on a PI computer; data needs to archived at a data center with better access and backup facilities.

25. Are the data archived at another facility or are there plans to do so? Please explain.

No

26. Is there an existing agreement or requirement driving this request to archive? Have you already contacted someone at NCEI?

This project is funded under the NOAA CDR program.

27. Do you have a data management plan for your data?

No

28. Have funds been allocated to archive the data at NCEI?

No

29. Identify the affiliated research project, its sponsor, and any project/grant ID as applicable.

NOAA CDR NA10NES4400001

30. Is there a desired deadline for NCEI to archive and provide access to the data?

Archive by: 2014-08-01

Accessible by:

31. Add any other pertinent information for this request.

None